

*If you are using a printed copy of this procedure, and not the on-screen version, then you **MUST** make sure the dates at the bottom of the printed copy and the on-screen version match. The on-screen version of the Collider-Accelerator Department Procedure is the Official Version. Hard copies of all signed, official, C-A Operating Procedures are kept on file in the C-A ESHQ Training Office, Bldg. 911A.*

C-A OPERATIONS PROCEDURES MANUAL

ATTACHMENT

4.56.ao RHIC Zone 6z1/STAR Sweep Checklist

Text Pages 1 through 3

C-A OPM Procedures in which this Attachment is used.

4.56		

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Approved: _____
 Collider-Accelerator Department Chairman Date

P. Ingrassia, W. MacKay

RHIC Zone 6z1/STAR Sweep Checklist

Team Leader (TL) _____ Sweeper#2 (S2) _____

Sweeper#3 (S3) _____ Sweeper#4 (S4) _____

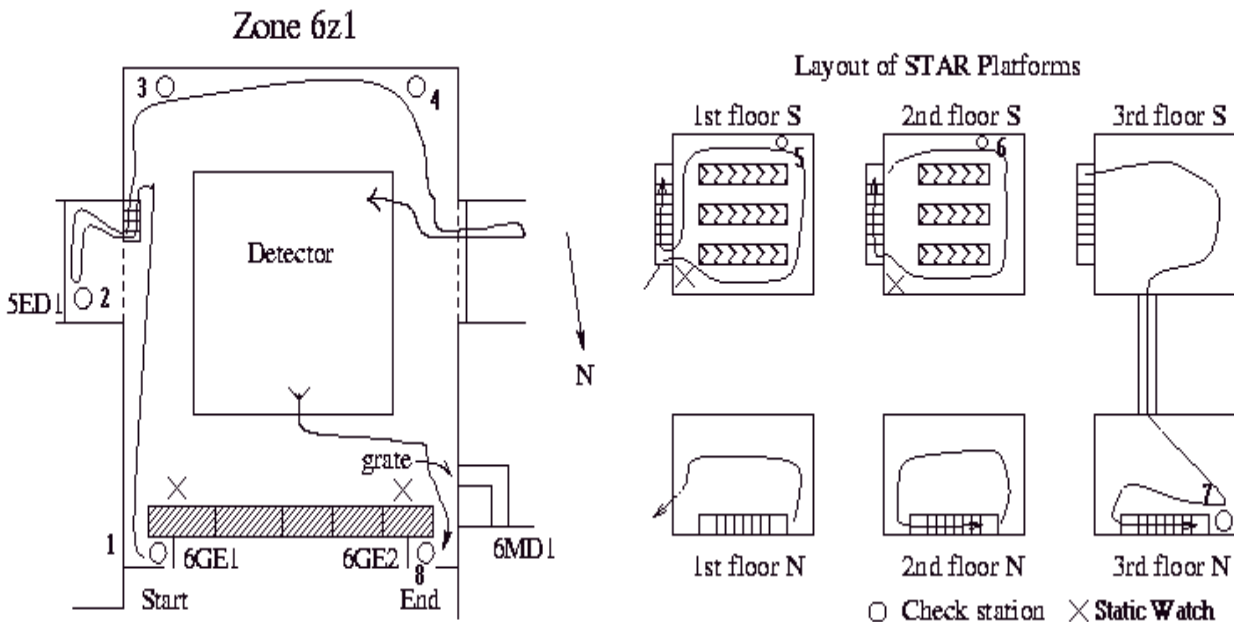
Time: _____ Date: _____

Note:

IF any workers are encountered during the sweep, **THEN** contact the OC to see if the sweep should be aborted. Workers shall leave the enclosure **WITH** the sweep team. **IF** the workers crash out of the enclosure **AND** do not exit with the sweep team, **THEN** the sweep shall be re-started.

Prerequisites

- Four persons to perform the sweep, two persons supplied by the STAR collaboration
- At least two sweepers not restricted from working at heights over five feet and who are not acrophobic
- RHIC Zone 6z1/STAR Sweep Checklist (three pages)
- Zones 5z1 and 6z2 should be searched and secured first
- Approved padlock for 6MD1 gate
- Required Tools: at least one flashlight,
- Walkie-talkies
- All Doors closed THEN 6z1 set to Controlled Access
- Keys: Sweep Reset key S/R015, and THREE Controlled Access keys CA014 (one token for each sweeper),
- padlock key



Note:

Before beginning the sweep:

- Contact the experiment to tell them a sweep will be performed.
- Ask the experiment to turn off their magnet(s)
- IF magnet(s) cannot be turned off THEN carry no ferrous objects while sweeping near the magnet(s) and obey postings and fencing to stay away from fields greater than 500 gauss.

Check

- ___ 1 TL contacts MCR and asks whether gate 6MD1 shows RESET on the RHIC PanelView.

Note

6MD1 gate must be reset before the 6z1 sweep may begin. IF the gate is padlocked, THEN the wireway need not be searched or padlocked .

- ___ 2 IF 6MD1 gate is not reset, THEN S2 stands static watch at the gate, TL opens the door and walks to the barrier at end of the wireway, TL sweeps back through the 6MD1 gate, TL padlocks 6MD1, TL resets 6MD1 using the Sweep Reset key S/R015 in the RESET keyswitch on the 6MD1 security box.
- ___ 3 TL observes RESET lamp light.
- ___ 4 TL contacts STAR Shift Leader (person in charge) and gets two STAR staff members to assist in the sweep.
- ___ 5 TL instructs the two STAR staff members that their role is to:
- stand static watch as assigned, and
 - challenge any person, other than the 4 sweep team members, to come to their position and await escort out of the hall.
 - TL gives each STAR staff member a CA key.
- ___ 6 Sweep team goes to 6GE1 in the wide angle hall building and asks MCR for simultaneous release
- ___ 7 TL opens 6GE1 gate by turning the CA015 key in the Controlled Access key-switch while operator in MCR presses simultaneous release for 6GE1.
- ___ 8 Sweep Team passes through 6GE1.
- ___ 9 TL STARTS SWEEP by turning the S/R015 key CW in the SWEEP key-switch on 6XCS1 next to 6GE1 gate (6GE1-I).
- ___ 10 TL observes AREA SECURED lamp blink once.
- ___ 11 Sweep Team sweeps up the labyrinth into the wide angle hall.
- ___ 12 IF there is a ladder from the floor to the crane cab ladder, THEN, S2 shall climb the ladder and search the airconditioner platform above 6GE1.
- ___ 13 TL instructs S3 to check the vent barrier and stand static watch in front of fan vent 6XAV1 (NE corner).
- ___ 14 TL instructs S4 to check the vent barrier and stand static watch in front of fan vent 6XAV2 (NW corner).
- ___ 15 S2 accompanies S4 to the WEST end of the hall.
- ___ 16 TL and S2 sweep to the SOUTH end of the hall (TL on the EAST side and S2 on the WEST side. TL AND S2 SHALL SEARCH THE UNDERSIDE OF THE DETECTOR AS THEY SWEEP TO THE SOUTH WALL.
- ___ 17 S2 stands static watch near check station 6XCS4 in the South West corner.
- ___ 18 TL goes up the stairs on the east wall, sweeps the platform, then goes to the 5ED1 door.
- ___ 19 TL sets second check station by turning the S/R015 key in the SWEEP keyswitch on 6XCS2.
- ___ 20 TL observes the yellow AREA SECURED lamp blinks once.
- ___ 21 TL sweeps down the stairs and sweeps to check station 6XCS3 in the south east corner.
- ___ 22 TL sets third check station by turning the S/R015 key in the SWEEP keyswitch at 6XCS3.

CONTINUED ON NEXT SHEET

- ___ 23 TL observes the yellow AREA SECURED lamp blinks once.
- ___ 24 TL sweeps to check station 6XCS4 in the south west corner and joins S2
- ___ 25 TL sets fourth check station by turning the S/R015 key in the SWEEP keyswitch at 6XCS4.
- ___ 26 TL observes the yellow AREA SECURED lamp blinks once.
- ___ 27 TL climbs stairs to the “laser platform” on the west wall.
- ___ 28 TL goes behind the curtain and sweeps the laser darkroom on the west wall.
- ___ 29 TL sweeps down the stairs and joins S2.
- ___ 30 TL and S2 sweep onto the first floor of the south platform of the detector.
- ___ 31 S2 goes to the foot of the strairs leading to the second floor (east side) and stands static watch.
- ___ 32 TL sweeps between all the racks and searches the spaces at the ceiling.
- ___ 33 TL searches under the solenoid magnet.
- ___ 34 TL sets fifth check station by turning the S/R015 key in the SWEEP keyswitch at 6XCS5 at the southwest corner of the platform.
- ___ 35 TL observes the yellow AREA SECURED lamp blinks once.
- ___ 36 TL joins S2 and they sweep up the stairs to the second floor.
- ___ 37 S2 goes to the foot of the strairs leading to the third floor and stands static watch.
- ___ 38 TL sweeps between all the racks and searches the spaces at the ceiling.
- ___ 39 TL sets sixth check station by turning the S/R015 key in the SWEEP keyswitch at 6XCS6 at the south end of the platform.
- ___ 40 TL observes the yellow AREA SECURED lamp blinks once.
- ___ 41 TL joins S2 and they sweep up the stairs to the third floor.
- ___ 42 Sweep Team stops on the third floor to visually search atop NORTH shield wall, the crane cab, the fan vent duct at the south east corner, and the top of the shielding over 6GE2 in the NW corner.
- ___ 43 Sweep Team Crosses the bridge to the North Platform third floor.
- ___ 44 TL sets seventh check station by turning the S/R015 key in the SWEEP keyswitch at 6XCS7 at the south end of the platform.
- ___ 45 TL observes the yellow AREA SECURED lamp blinks once.
- ___ 46 Sweep Team sweeps down the stairs to the second floor.
- ___ 47 Sweep Team sweeps the second floor.
- ___ 48 Sweep Team sweeps down the stairs to the first floor.
- ___ 49 Sweep Team sweeps the first floor.
- ___ 50 Sweep Team sweeps off the platform and joins S4 at 6XAV2.
- ___ 51 TL calls S3 to exit the hall with the team.
- ___ 52 Sweep team sweeps down the 6GE2 labyrinth
- ___ 53 TL ENDS SWEEP at eighth check station (6XCS8) by turning S/R015 key in the SWEEP keyswitch on the 6GE2-I gate box.
- ___ 54 TL observes AREA SECURED lamp remains lighted.
- ___ 55 TL calls MCR for simultaneous release at 6GE2.
- ___ 56 Sweep Team sweeps out 6GE2.
- ___ 57 TL contacts MCR to verify 6z1 sweep is good

<p style="text-align: center;">Note: If Area Secured Lamp Is Not Lit Then contact MCR to verify sweep is good.</p>
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- ___ 58 TL collects CA keys from STAR staff members.
- ___ 59 After returning keys to keytree in MCR, TL resets the RCA gates 6GE1 and 6GE2 using the RHIC PanelView.
- ___ 60 After returning to MCR and verifying that all information is filled out completely, TL files the checklist in FY_xx Sweep Log binder.